Notice of Allowability	Application No.	Applicant(s)	
	09/929,412	OUCHI, NORMAN KEN	
	Examiner	Art Unit	
	Scott L. Jarrett	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/2/2007.

2. ☒ The allowed claim(s) is/are 80-99.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 8/14/2007
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Ouchi on August 9, 2007.

The following is an Allowance in response to the Amendment submitted on July 2, 2007. Claims 80-99 are currently amended, as recited in the Examiner's amendment below and are allowed.

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in this application.

Claims 1-79 Canceled.

Claim 80. (Currently Amended) A method for ~~generating~~ adapting in real-time a ~~workflow~~ composite route from predefined workflow sub-routes while the composite route is executing in ~~the~~ a workflow engine, comprising the steps of:

using a route development and editor tool to: ~~defining a route creation function augmented to provide an adaptive node;~~

define a composite route comprising a sequence of nodes including an initial node, an adaptive node, an adapted sub-process between a first node and a second node, and a final node;

wherein the adaptive node is positioned in the route to be executed before the adapted sub-process, assigned to a key user, and provides a sub-route selection function to implement the adapted sub-process;

define and store ~~defining and storing~~ the set of predefined workflow ~~local~~ sub-routes in a sub-route library prior to execution of the composite route wherein each ~~local~~ sub-route comprises a sequence of nodes to perform the adapted sub-process ~~perform locally a customer request;~~

~~defining a composite route comprising an initial node and a final node;~~

~~wherein the initial node is an adaptive node assigned to a key user and provides a sub-route selection function;~~

~~defining a workflow providing the adaptive node for selecting a local sub-route from the sub-route library and inserting a copy of the selected local sub-route into the composite route and connecting the end of the selected local sub-route to the final node of the composite route;~~

executing the composite route in the workflow engine starting at the initial node;~~,~~

executing the adaptive node in the composite route, wherein the key user selects ~~an appropriate local~~ a sub-route to implement the adapted sub-process from the sub-route library using the sub-route selection function ~~to process the customer request~~; and

adapting ~~the adaptive node automatically modifies~~ the composite route in response to the key user's selection, during execution of the composite route, wherein the workflow engine adapts the composite route by inserting a copy of the selected ~~local~~ sub-route into the composite route between the first node and second node ~~and connecting the end of the selected local sub-route to the final node of the composite route;~~

executing the ~~selected local sub-route~~ adapted composite route until the composite route's final node is performed.

Claim 81. (Currently Amended) The method of Claim 80, wherein the adaptive node provides a multiple ~~local~~ sub-route selection function such that the selected multiple ~~local~~ sub-routes are inserted in the composite route and executed in parallel.

Claim 82 (Currently Amended) The method of Claim 80, wherein the adaptive node provides a multiple ~~local~~ sub-route selection function such that the selected multiple ~~local~~ sub-routes are inserted in the composite route and executed in parallel and the final node provides a join function, including an "and join", an "or join", a "majority join", a "weighted join"; wherein the composite route completes when: all ~~local~~ sub-routes complete for an "and join"; a first ~~local~~ sub-route completes for an "or join"; a majority of sub-routes complete for a "majority join"; and for a "weighted join", each of the selected ~~local~~ sub-routes are assigned a weight, a positive or negative number, such that the composite route completes when the sum of the weights of completed ~~local~~ sub-routes exceeds a predetermined value.

Claim 83 (Currently Amended) The method of Claim 80, wherein a set of local users are defined and the adaptive node provides a user selection function from the set of local users to specify a user for a node in the selected ~~local~~ sub-route.

Claim 84. (Currently Amended) The method of Claim 80, wherein a set of local users are defined by selecting users from a set of users ~~where the~~ using a selection criteria, ~~includes~~ including the composite route, site, user role, the selected ~~local~~ sub-route and ~~local~~ sub-route node, user organization level; and the adaptive node provides a user selection function from the set of local users to specify a user for a node in the selected ~~local~~ sub-route.

Claim 85 (Currently Amended) The method of Claim 80, wherein the set of ~~local~~ sub-routes is selected from the sub-route library ~~where the~~ using a selection criteria, ~~includes~~ including the composite route, ~~customer request~~ adapted process, site, ~~local~~ sub-route function, and user organization level.

Claim 86 (Currently Amended) The method of Claim 80, wherein the selected ~~local~~ sub-route includes an adaptive node.

Claim 87 (Currently Amended) The method of Claim 80, wherein the adaptive node provides a ~~local~~ sub-route modification function such that the selected sub-route is modified and stored in the sub-route library.

Claim 88 (Currently Amended) The method of Claim 80, wherein the adaptive node provides a sub-route assignment to an external event, including a button on a screen, for a node in the selected ~~local~~ sub-route such that when the external event is activated, including a user pushing the button, the assigned sub-route is inserted ~~and activated~~ in the compound route.

Claim 89 (Currently Amended) A method for ~~generating~~ adapting in real-time a composite workflow route from predefined ~~work-flow~~ workflow sub-routes while the composite route is executing in ~~the~~ a workflow engine, comprising the steps of:

using a route development and editor tool to:

~~defining a route creation function augmented to provide an adaptive node;~~

define a composite route comprising a sequence of nodes including an initial node, an adaptive node, an adapted sub-process between a first node and a second node, and a final node;

wherein the adaptive node is positioned in the route to be executed before the adapted sub-process, assigned to a key user, and provides a sub-route selection function and user selection function to implement the adapted sub-process;

define and store ~~defining and storing a~~ the set of ~~local~~ predefined workflow sub-routes in a sub-route library prior to execution of the composite route wherein each ~~local~~ sub-route comprises a sequence of nodes to perform the adapted sub-process ~~locally a customer request~~;

define and store ~~defining and storing~~ a set of local users prior to execution of the composite route wherein each local user can be assigned a node in a selected ~~local~~ sub-route to implement an adapted sub-process ~~perform locally a customer request~~;

~~defining a composite route comprising an initial node and a final node;~~

~~wherein the initial node is an adaptive node assigned to a key user and provides a sub-route selection function and user selection function;~~

~~defining a workflow providing the adaptive node for selecting a local sub-route from the sub-route library and selecting a local user for a node in the selected sub-route using the user selection function, inserting a copy of the selected local sub-route into the composite route, assigning the selected user to the node in the selected local sub-route, and connecting the end of the selected local sub-route to the final node of the composite route;~~

executing the composite route in the workflow engine ~~beginning~~ starting ~~with~~ at the initial node;~~,~~

executing the adaptive node in the composite route, wherein the key user selects a ~~an appropriate local~~ sub-route to implement the adapted sub-process from the sub-route library using the sub-route selection function and a local user for a node in the selected sub-route using the user selection ~~function to process the customer request~~; and

adapting ~~the adaptive node automatically modifies~~ the composite route in response to the key user's selections, during execution of the composite route, wherein the workflow engine adapts the composite route by inserting a copy of the selected ~~local~~ sub-route into the composite route between the first node and second node, and assigning the selected user to the node in the selected ~~local~~ sub-route~~, and connecting the end of the selected local sub-route to the final node of the composite route~~;

executing the adapted ~~selected local sub-route~~ composite route until the composite route's final node is performed.

Claim 90 (Currently Amended) The method of Claim 89, wherein the adaptive node provides a multiple ~~local~~ sub-route selection function such that the selected multiple ~~local~~ sub-routes are inserted in the composite route and executed in parallel and the final node provides a join function, including an "and join", an "or join", a "majority join", a "weighted join"; wherein the composite route completes when: all ~~local~~ sub-routes complete for an "and join"; a first ~~local~~ sub-route completes for an "or join"; a majority of sub-routes complete for a "majority join"; and for a "weighted join", each of the selected ~~local~~ sub-routes are assigned a weight, a positive or negative number, such that the composite route completes when the sum of the weights of completed ~~local~~ sub-routes exceeds a predetermined value.

Claim 91 (Currently Amended) The method of Claim 89, wherein a set of local users are defined by selecting from a set of users ~~where the~~ using a selection criteria, including ~~includes~~ the composite route, site, user role, the selected ~~local~~ sub-route and ~~local~~ sub-route node, user organization level; and the adaptive node provides a user selection function from the set of local users to specify a user for a node in the selected ~~local~~ sub-route.

Claim 92 (Currently Amended) The method of Claim 89, wherein the set of ~~local~~ sub-routes is selected from the sub-route library ~~where the~~ using a selection criteria, including ~~includes~~ the composite route, customer request, site, ~~local~~ sub-route function, and user organization level.

Claim 93 (Currently Amended) The method of Claim 89, wherein the selected ~~local~~ sub-route includes an adaptive node.

Claim 94 (Currently Amended) The method of Claim 89, wherein the adaptive node provides a ~~local~~ sub-route modification function such that the selected sub-route is modified and stored in the sub-route library.

Claim 95 (Currently Amended) A method for ~~generating~~ adapting in real-time a composite ~~workflow~~ route from predefined workflow ~~work-flow~~ sub-routes while the composite route is executing in a ~~the~~ workflow engine, comprising the steps of:

using a route development and editor tool to:

define a composite route comprising a sequence of nodes including an initial node, a first adaptive node, a first adapted sub-process between a first node and a second node, and a final node;

wherein the first adaptive node is positioned in the route to be executed before the first adapted sub-process, assigned to a key user, and provides a sub-route selection function to implement the first adapted sub-process;

~~defining a route creation function augmented to provide an adaptive node;~~

define and store ~~defining and storing a~~ the set of predefined workflow ~~local~~ sub-routes in a sub-route library prior to execution of the composite workflow wherein at least one ~~local~~ sub-route comprises a second ~~first~~ adaptive node that provides a sub-

route selection function and a user selection function and a second adapted sub-process between a third node and fourth node ~~a final node~~;

define and store ~~defining and storing~~ a set of local users prior to execution of the composite workflow wherein each local user can be assigned a node in a selected ~~local~~ sub-route to perform implement a sub-process ~~locally a customer request~~;

~~defining a composite route comprising an initial node and a final node;~~

~~wherein the initial node is a second adaptive node assigned to a key user and provides a sub-route selection function;~~

~~defining a workflow providing the adaptive node for selecting a local sub-route from the sub-route library and selecting a local user for a node in the selected sub-route using the user selection function, inserting a copy of the selected local sub-route into the composite route, assigning the selected user to the node in the selected local sub-route, and connecting the end of the selected local sub-route to the final node of a sub-route or composite route;~~

executing the composite route in the workflow engine beginning with the composite route's initial node;

executing, the first adaptive node in the composite route, wherein the key user selects ~~an appropriate second local~~ a first sub-route from the sub-route library using the sub-route selection function to ~~process the customer request~~ implement the first adapted process;

adapting ~~the second adaptive node automatically modifies~~ the composite route in response to the key user's selections, during execution of the composite route, wherein the workflow engine adapts the composite route by inserting a copy of the selected ~~second local~~ first sub-route into the composite route ~~and connecting the end of the selected second local sub-route the final node of the composite route~~ between the first and second nodes;

executing the selected ~~second~~ first ~~local~~ sub-route where the user of the ~~first~~ second adaptive node selects ~~an appropriate first~~ a second ~~local~~ sub-route from the sub-route library using the sub-route selection function and a user for a node in the selected ~~first~~ second ~~local~~ sub-route using the user selection function to ~~process the customer request~~ implement the second adapted sub-process; and

adapting the first ~~adaptive node automatically modifies the second~~ sub-route in response to the user's selections, during execution of the first sub-route, wherein the workflow engine adapts the first sub-route by inserting a copy of the selected ~~first local~~ second sub-route into the ~~second local~~ first sub-route between the third node and fourth nodes, and assigning the selected user to the node in the selected ~~first~~ second ~~local~~ sub-route~~, and connecting the end of the selected first local sub-route to the final node of the second local sub-route~~;

executing the ~~first sub-route~~ composite route until the composite route's final node is performed.

Claim 96 (Currently Amended) The method of Claim 95, wherein the adaptive node provides a multiple ~~local~~ sub-route selection function such that the selected multiple ~~local~~ sub-routes are inserted in the composite route and executed in parallel and the final node provides a join function, including an "and join", an "or join", a "majority join", a "weighted join"; wherein the composite route completes when: all ~~local~~ sub-routes complete for an "and join"; a first ~~local~~ sub-route completes for an "or join"; a majority of sub-routes complete for a "majority join"; and for a "weighted join", each of the selected ~~local~~ sub-routes are assigned a weight, a positive or negative number, such that the composite route completes when the sum of the weights of completed ~~local~~ sub-routes exceeds a predetermined value.

Claim 97. (Currently Amended) The method of Claim 95, wherein a set of local users are defined by selecting from a set of users ~~where the~~ using a selection criteria, ~~includes~~ including the composite route, site, user role, the selected ~~local~~ sub-route and ~~local~~ sub-route node, user organization level; and the adaptive node provides a user selection function from the set of local users to specify a user for a node in the selected ~~local~~ sub-route.

Claim 98 (Currently Amended) The method of Claim 95, wherein the set of ~~local~~ sub-routes is selected from the sub-route library ~~where the~~ using a selection criteria, ~~includes~~ including the composite route, customer request, site, ~~local~~ sub-route function, and user organization level.

Claim 99 (Currently Amended) The method of Claim 95, wherein the adaptive node provides a ~~local~~ sub-route modification function such that the selected sub-route is modified and stored in the sub-route library.

ALLOWANCE

The following is an Allowance in response to the Amendment submitted on July 2, 2007. Claims 80-99 are currently amended, as recited above in the Examiner's amendment and are allowed.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance.

The present invention is directed to system and method for adapting the route of workflow/business process during the execution of the workflow by a workflow engine wherein users define and store, via a route development and editor tool prior to execution of the workflow route, a set of predefined workflow sub-routes, a set of local users and a composite route comprising a sequence of nodes including an initial node, an adaptive node, an adapted sub-process between a first node and a second node, and a final node.

The workflow route is adapted, during the execution of the one or more adaptive nodes of the composite route, when the one or more adaptive nodes prompts for the assigned key user to select a sub-route from the sub-route library and a user for a node in the selected sub-route to implement the adapted sub-process wherein the workflow engine adapts the composite route by inserting a copy of the selected sub-route into the composite route between the first and second nodes in the sub-route.

More generally the adaptive node is a workflow route step that, when included in a route, provides the user associated with the step the ability to specify subsequent route steps so that while the route is executing, the route can be adapted to a business process. The workflow system executes the step-by-step sequence of the route to the adaptive node (route step) wherein the user can then specify the subsequent route steps and associated users and adapt the execution of the route thereby changing/modifying the route structure. It is noted that specifying the subsequent route steps does not include selecting a conditional branch choice in the route by a Pass or Fail selection or similar fully specified set of route steps with a conditional branch as is well known in the art.

The closest prior art by Ott, Marcus, Conceptual Design and Implementation of a Graphical Workflow-Modeling Editor in the Context of Distributed Groupware-Databases (1994), ActionWorkflow Process Builders User's Guide (1996), Han et al., A Taxonomy of Adaptive Workflow Management (1998), and Caruso et al., U.S. Patent No. 5,848,271 to teach or suggest either singularly or in combination a method for adapting in real-time a composite workflow route from predefined workflow sub-routes while the composite route is executing in a workflow engine, comprising a route development and editor tool to: define a composite route comprising a sequence of nodes including an initial node, an adaptive node, an adapted sub-process between a first node and a second node, and a final node; wherein the adaptive node is positioned in the route to be executed before the adapted sub-process, assigned to a key user, and provides a

sub-route selection function to implement the adapted sub-process; define and store the set of predefined workflow sub-routes in a sub-route library prior to execution of the composite route wherein each sub-route comprises a sequence of nodes to perform the adapted sub-process; executing the adaptive node in the composite route, wherein the key user selects a sub-route to implement the adapted sub-process from the sub-route library using the sub-route selection function; and adapting the composite route in response to the key user's selections, during execution of the composite route, wherein the workflow engine adapts the composite route by inserting a copy of the selected sub-route into the composite route between the first node and second node as recited in independent Claim 80 and 89 and 95.

The closest prior art by Ott, Marcus, Conceptual Design and Implementation of a Graphical Workflow-Modeling Editor in the Context of Distributed Groupware-Databases (1994), ActionWorkflow Process Builders User's Guide (1996), Han et al., A Taxonomy of Adaptive Workflow Management (1998), and Caruso et al., U.S. Patent No. 5,848,271 a method for adapting in real-time a composite workflow route from predefined workflow sub-routes while the composite route is executing in a workflow engine, comprising a route development and editor tool to: define a composite route comprising a sequence of nodes including an initial node, an adaptive node, an adapted sub-process between a first node and a second node, and a final node; wherein the adaptive node is positioned in the route to be executed before the adapted sub-process, assigned to a key user, and provides a sub-route selection function and user selection

function to implement the adapted sub-process; define and store the set of predefined workflow sub-routes in a sub-route library prior to execution of the composite route wherein each sub-route comprises a sequence of nodes to perform the adapted sub-process; define and store a set of local users prior to execution of the composite route wherein each local user can be assigned a node in a selected sub-route to implement an adapted sub-process; executing the adaptive node in the composite route, wherein the key user selects a sub-route to implement the adapted sub-process from the sub-route library using the sub-route selection function and a local user for a node in the selected sub-route using the user selection; and adapting the composite route in response to the key user's selections, during execution of the composite route, wherein the workflow engine adapts the composite route by inserting a copy of the selected sub-route into the composite route between the first node and second node, and assigning the selected user to the node in the selected sub-route as recited in independent Claim 89 and 95.

Ott teaches a system and method for generating a workflow route in real-time from predefined workflow sub-routes comprising: defining and storing a set of local sub-routes (sub-workflows, modules, components, templates) in a library (repository) wherein each local sub-route comprises a sequence of nodes to perform a customer request; defining a composite route (workflow) comprising initial and final nodes wherein the initial node is an adaptive node assigned to a (key) user and provides a sub-route selection function; executing the composite route in the workflow starting with the initial

adaptive node wherein the user selects an appropriate sub-route from a library of sub-routes using the sub-route selection function; automatically modifying the composite route, by the adaptive node, in response to the user's selection by inserting a copy of the selected sub-route into the composite route; and executing the selected sub-route until the composite route's final node is performed

Han et al. teach a system and method to adapt a route to implement a process comprising dividing the process into a sequence of process steps (Last Paragraph, Page 1; Paragraph 1, Page 2); assigning to each process step, except for a first process step for which a workflow step is specified during the execution of the route a workflow step to implement the process step where the sequence of workflow steps creates a route; defining a set of potential process step candidates, each with an associated workflow step, and define a list of process step candidates; include in the route prior to the first process step, an adaptive workflow step, to select a process step from the list of process step candidates to implement the first process step; executing the route in a workflow system such that the adaptive workflow step is executed and used to select a process step with the corresponding workflow step to implement the first process step and adapt the route to implement the process by inserting the selected workflow step into the route to implement the first step.

Caruso et al. teach a system and method for adapting a route while processing a route comprising: a set of step candidates and a list of step candidates stored in the

computer; an adaptive workflow program executing in the computer and providing an adaptive step as a screen on the user interface to specifying a subsequent step in a route by selecting a step from the list of candidates during the processing of the route; a route, containing the adaptive step, stored in the computer; wherein the adaptive program processes the route and the adaptive step is processed to specify the subsequent step in the route which adapts the route by inserting the specified step in the route as the subsequent step.

The following is an examiner's statement of reasons for allowance: None of the prior art of record, taken individually or in any combination, teach, inter alia, a method for adapting in real-time a composite workflow route from predefined workflow sub-routes while the composite route is executing in a workflow engine, comprising a route development and editor tool to: define a composite route comprising a sequence of nodes including an initial node, an adaptive node, an adapted sub-process between a first node and a second node, and a final node; wherein the adaptive node is positioned in the route to be executed before the adapted sub-process, assigned to a key user, and provides a sub-route selection function and user selection function to implement the adapted sub-process; define and store the set of predefined workflow sub-routes in a sub-route library prior to execution of the composite route wherein each sub-route comprises a sequence of nodes to perform the adapted sub-process; define and store a set of local users prior to execution of the composite route wherein each local user can be assigned a node in a selected sub-route to implement an adapted sub-process;

executing the adaptive node in the composite route, wherein the key user selects a sub-route to implement the adapted sub-process from the sub-route library using the sub-route selection function and a local user for a node in the selected sub-route using the user selection; and adapting the composite route in response to the key user's selections, during execution of the composite route, wherein the workflow engine adapts the composite route by inserting a copy of the selected sub-route into the composite route between the first node and second node, and assigning the selected user to the node in the selected sub-route.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Carlsen, Steinar, Conceptual modeling and composition of flexible workflow models (1998), teaches system and method for adapting a workflow route while the workflow is executing in a workflow engine wherein workflow users select from a alternative pre-defined workflow sub-processes/routes (reusable model fragments, workflow components) in order to support open-ended processes (flexible/ad-hoc workflows).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (571) 272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Scott L. Jarrett
August 14, 2007

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SUPERVISORY PATENT EXAMINER
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